



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,588	04/16/2004	Hirofumi Suzuki	299002057700	1755

25226 7590 07/11/2007  
MORRISON & FOERSTER LLP  
755 PAGE MILL RD  
PALO ALTO, CA 94304-1018

EXAMINER
----------

DANIELSEN, NATHAN ANDREW

ART UNIT	PAPER NUMBER
----------	--------------

2627

MAIL DATE	DELIVERY MODE
-----------	---------------

07/11/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/826,588

Applicant(s)

SUZUKI, HIROFUMI

Examiner

Nathan Danielsen

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 3 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-12 and 14-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 01/23/06 & 08/25/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 2627

#### **DETAILED ACTION**

1. Claims 1-18 are pending. Claims 3 and 13 are withdrawn pursuant to applicant's election of 17 April 2007.

#### ***Election/Restrictions***

2. Claims 3 and 13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 17 April 2007.

#### ***Priority***

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Drawings***

4. Figure 7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Specification***

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Art Unit: 2627

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 14, 15, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Park et al (US Patent Application Publication 2003/0053394; hereinafter Park).

Regarding claim 1, Park discloses an optical pickup device, comprising:

a light source (element 40 in figure 9) for emitting light to an information recording medium;

a light detector including a plurality of light receiving portions (element 60 in figures 8 and 9), the light detector receiving light reflected by the information recording medium by the plurality of light receiving portions so as to detect information represented by the reflected light (¶ 59); and

a correction optical device section including a correction optical device for correcting a light path of the reflected light before the plurality of light receiving portions receive the reflected light (element 57 in figure 9), and a correction optical device control section for controlling the correction optical device such that a ratio of a light spot received by the plurality of light receiving portions is a prescribed value (¶ 60; where the movement of element 57 implies a controller controlling the movement and where the controller would use a comparison of a light intensity received by element 60 with a threshold to determine the optimum position of element 57).

Regarding claim 2, Park discloses where the correction optical device section is located on a portion of a light path from the information recording medium to the plurality of light receiving portions, the portion not overlapping with a light path from the light source to the information recording medium (figure 9).

Art Unit: 2627

Regarding claim 14, Park discloses where the optical pickup device further comprises an objective lens, located on a light path from the light source to the information recording medium, for converging the light emitted by the light source on a surface of the information recording medium (element 55 in figure 9).

Regarding claim 15, Park discloses a method for controlling an optical pickup device, comprising the steps of:

correcting a light path of light reflected by an information recording medium by a correction optical device such that a ratio of a light spot received by the plurality of light receiving portions is a prescribed value (¶ 60; where the movement of element 57 implies a controller controlling the movement and where the controller would use a comparison of a light intensity received by element 60 with a threshold to determine the optimum position of element 57); and

fixing the correction optical device which has corrected the light path of the reflected light (suggested by ¶ 63).

Regarding claim 17, Park discloses step of locating the correction optical device on a portion of a light path from the information recording medium to the plurality of light receiving portions, the portion not overlapping with a light path from the light source to the information recording medium (inherent in the method of producing the optical system of figure 9).

Regarding claim 18, Park discloses the step of adjusting a distance between an objective lens and a surface of the information recording medium, the objective lens being located on a light path from the light source to the information recording medium, such that the light emitted by the light source is converged on the surface of the information recording medium before the step of correcting (¶ 48).

Art Unit: 2627

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park, in view of Imada et al (US Patent 5,404,344; hereinafter Imada).

Regarding claims 4-8, Park discloses everything claimed, as applied to claim 1. However, Park fails to disclose where the correction optical device includes a focusing error generation optical device for causing a focusing error to the reflected light.

In the same field of endeavor, Imada discloses where the optical pickup device further comprises a focusing error generation optical device, located on the optical path from the information recording medium to the plurality of light receiving portions, for causing a focusing error to the reflected light, wherein the focusing error generation optical device includes an astigmatism generation device/cylindrical lens for causing an astigmatism to the reflected light and the plurality of light receiving portions receive the reflected light to which the astigmatism is caused by the astigmatism generation device, and thus the light detector detects focusing error information representing the focusing error (element 7 in figure 1 and col. 2, lines 4-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the optical system of Park with that of Imada, for the purpose of obtaining a focus error using the astigmatism method (col. 2, lines 4-15) in order to accurately control the focus position of the light beam.

10. Claims 9-12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park, in view of Itonaga (US Patent 5,623,466).

Art Unit: 2627

Regarding claim 9, Park discloses everything claimed, as applied to claim 1. However, Park fails to disclose where the correction optical device control section adjusts an angle of the correction optical device to correct the light path of the reflected light.

In the same field of endeavor, Itonaga discloses where the correction optical device control section adjusts an angle of the correction optical device to correct the light path of the reflected light (col. 5, lines 43-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the optical system of Park with that of Itonaga in order to compensate the tilt of the disc (col. 5, lines 43-50) and thereby to accurately control the position of the light focused on the disc.

Regarding claim 10, Park, in view of Itonaga discloses everything claimed, as applied to claim 9. However, Park fails to disclose where the correction optical device control section includes a location angle control section for controlling the angle of the correction optical device with respect to a horizontal direction.

In the same field of endeavor, Itonaga discloses where the correction optical device control section includes a location angle control section for controlling the angle of the correction optical device with respect to a horizontal direction (element 23 in figure 1 in combination with col. 5, lines 43-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the optical system of Park with that of Itonaga in order to compensate the tilt of the disc (col. 5, lines 43-50) and thereby to accurately control the position of the light focused on the disc.

Regarding claim 11, Park, in view of Itonaga, discloses everything claimed, as applied to claim 10. Additionally, park discloses a control section for controlling the correction optical device driving section in accordance with the ratio of the light spot received by the plurality of light receiving portions (§ 60; where the movement of element 57 implies a controller controlling the movement and where the controller would use a comparison of a light intensity received by element 60 with a threshold to determine the optimum position of element 57). However, Park fails to disclose where the location angle

Art Unit: 2627

control section includes a correction optical device driving section for changing the angle of the correction optical device with respect to the horizontal direction.

In the same field of endeavor, Itonaga discloses where the location angle control section includes a correction optical device driving section for changing the angle of the correction optical device with respect to the horizontal direction (element 23 in figure 1).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the optical system of Park with that of Itonaga in order to compensate the tilt of the disc (col. 5, lines 43-50) thereby to accurately control the position of the light focused on the disc.

Regarding claim 12, Park, in view of Itonaga, discloses everything claimed, as applied to claim 11. However, Park fails to disclose the details of the actuator for tilting the correction optical device.

In the same field of endeavor, Itonaga discloses where the correction optical device driving section includes a coil member provided at an end of the correction optical device and a magnet member provided so as to face the coil member and where the control section controls an electric current to be supplied to the coil member to generate a magnetic force between the coil member and the magnet member, so as to control the correction optical device driving section to change the angle of the correction optical device with respect to the horizontal direction (inherent in the well-known construction of element 8 in figure 1 and col. 5, lines 43-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the optical system of Park with that of Itonaga in order to compensate the tilt of the disc (col. 5, lines 43-50) thereby to accurately control the position of the light focused on the disc.

Regarding claim 16, Park discloses everything claimed, as applied to claim 15. However, Park fails to disclose the step of correcting includes the step of adjusting an angle of the correction optical device with respect to a horizontal direction.

In the same field of endeavor, Itonaga discloses the step of correcting includes the step of adjusting an angle of the correction optical device with respect to a horizontal direction (inherent in the well-known construction of element 8 in figure 1 and col. 5, lines 43-50).



Art Unit: 2627

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the method of Park with that of Itonaga in order to compensate the tilt of the disc (col. 5, lines 43-50) thereby to accurately control the position of the light focused on the disc.

***Closing Remarks/Comments***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Danielsen whose telephone number is (571) 272-4248. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:00 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nathan Danielsen  
07/02/2007

*/Thang V. Tran/*  
Thang V. Tran  
Primary Examiner  
Art Unit 2627